

Wednesday, 9/26/2007 7:56:07 AM  
User: Kim Johnston

Process Sheet

*SPV*

Customer : CU-DAR001 Dart Helicopters Services  
Job Number : 34875 *2*  
Estimate Number : 10035  
P.O. Number :  
This Issue : 9/26/2007 S.O. No. :  
Prsht Rev. : NC  
First Issue : *11* Type : MACHINED PARTS  
Previous Run : 31389  
Written By : *[Signature]*  
Checked & Approved By : *[Signature]*  
Comment : Est. A 01.05.04 New Issue EC

Drawing Name : SADDLE BILLET

Part Number : D6101007  
Drawing Number : D6101 REV A  
Project Number : N/A  
Drawing Revision : A  
Material :  
Due Date : 10/26/2007 Qty: *300* Um: Each

Additional Product

Job Number:



Seq. #. Machine Or Operation:

Description :

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: *4685*  
a) Description: Aluminum billet

b) *7.750" x 8.250" x 2.50" thick*

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.750" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

*C 207/09/26*

*(300)*

2.0

D6101007P

7075-T7351 8.25X7.75X2.5



Comment: Qty.: 1.0000 Each(s)/Unit Total : 300.0000 Each(s)  
7075-T7351 8.25X7.75X2.5

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

*8/31/08 (100)*  
*08/07/24*

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

*8/31/08 (x100)*  
*counts*



Date: Wednesday, 9/26/2007 7:56:08 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 34875

Part Number: D6101007

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

6.0

QC21

FINAL INSPECTION/W/O RELEASE



100

Comment: FINAL INSPECTION/W/O RELEASE

208105/08  
MF 08-08-05

Job Completion



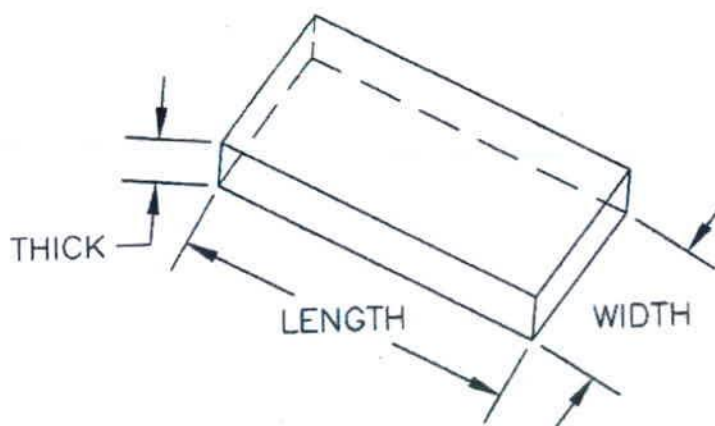




**DART**

DESIGN CP	DRAWN BY CP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED S	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

## SPECIFICATION CONTROL DRAWING

**RELEASED**  
01.04.23

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH X WIDTH X THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

STOP COPY  
REL. TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34875

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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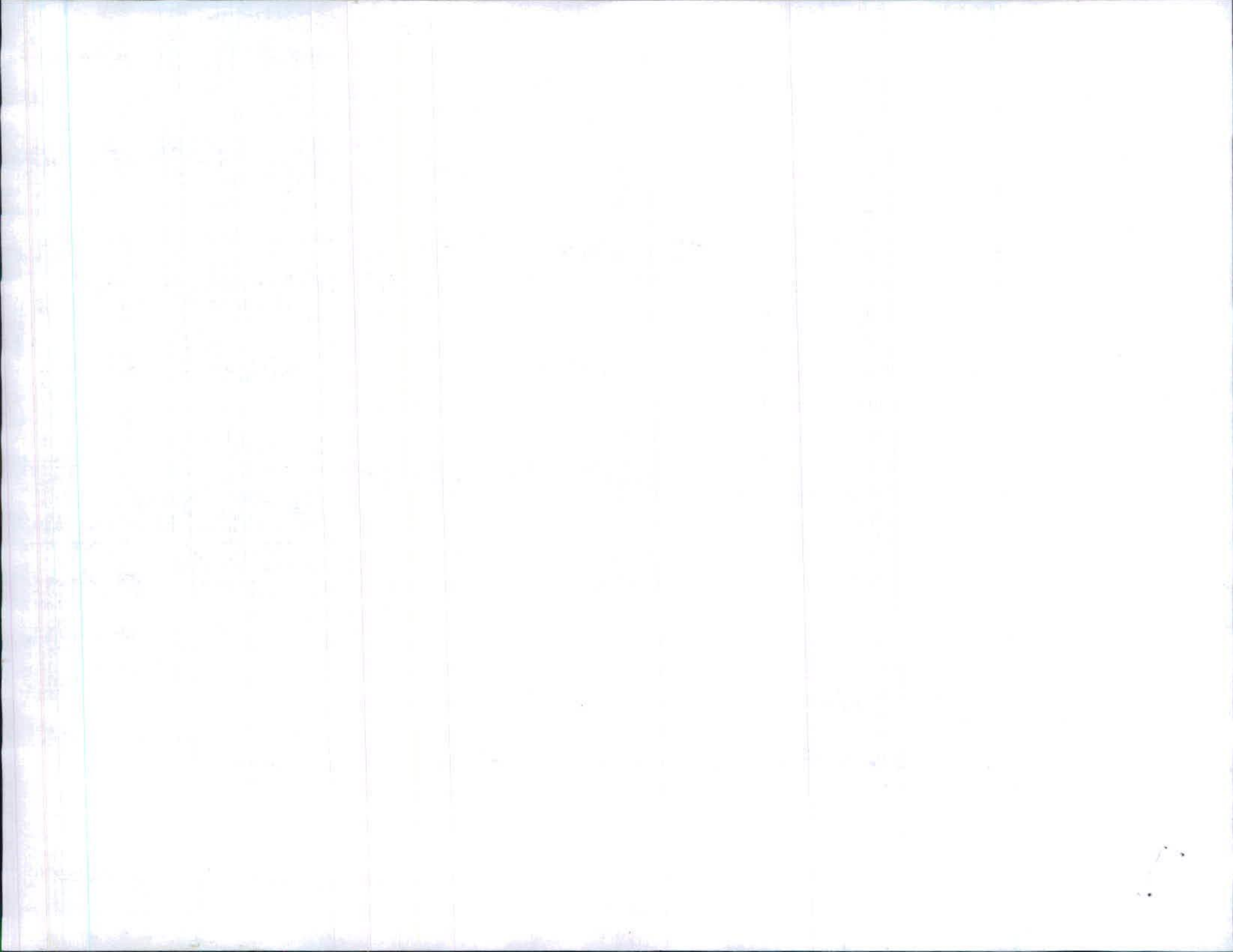
REQUISITION CLIENT-CUSTOMER REQUISITION NO.	NO. COM. CLIENT-CUST. ORD. NO.	COMPTÉ-ACCT.	VEND. SLS	TERR.	EXPÉDIE PAR-SHIP VIA	DATE DE LIVR. 23 JUIL. 2008
	4685	91037	200	50	FRAGILE (PPD)	Manitowish
ACHETEUR-PURCHASING AGENT	TELEPHONE	H/C	TAXES	NO. COM. ORD.	REGION LIVRAISON-DEL. ZONE	F.A.B.-F.O.B.
INDA LACELLE	613 632-3336	9	0	1	C/C	PREPAID
RE A-SHIP TO:	VENDU A-SOLD TO:				INFORMATION CRÉDIT-CREDIT INFORMATION	
	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY ON K6A 1K7				ROUTE 01*NL-07/1 31-NL-07/2	
INSTRUCTIONS/LIVRAISON-DELIVERY	INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)				INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)	
INQ-679881					S 00/07/13	

DESCRIPTION - ITEM 1	QTE/UNITE COM.-ORDERED		PCES/PO COM.-ORD.	POIDS COM.-WT. ORDERED
2.5000 PLATE 7075-T7351 ALUM 8.25" X 5.00"	100 PCS		PCS	1042
BLACK W/RED STRIPE	BALLOTS-BUNDLES		PCES/PO EXP. SHIP.	POIDS EXP.-WT. SHIPPED
	3		100	1042
<b>CERTIFICATE OF CONFORMANCE</b>	COULÉE INFO-HEAT INFO		QTE-QTY	FORME-SHAPE
A.M. Castle & Co. certifies that the material(s) supplied under this document will meet and conform to the specifications of the product(s) described hereon.	43653941			I.A.C.
A.M. Castle & Co. (Canada) Inc.	INSTRUCTIONS			ENT.-WT.
	GRAIN TO RUN ALONG 5.00"			
	THICKNESS TOL.: +.030"/- .000"			
	TOL: +.030"/- .000"			
	PRIOR DIST/ORD: 01 616845			
WEIGHT FOR SHIPPING PURPOSES ONLY. SEE INVOICES FOR ACCURATE BILLING WEIGHT. PLEASE SIGN AND DATE DRIVER'S COPY FOR RECEIPT OF MATERIAL AND, IF CHECKED, TEST REPORTS.	INSTRUCTIONS (CONT'D.)			
<input type="checkbox"/>	100 X 8.25" X 5.00"			

DESCRIPTION - ITEM 2	QTE/UNITE COM.-ORDERED		PCES/PO COM.-ORD.	POIDS COM.-WT. ORDERED
2.5000 PLATE 7075-T7351 ALUM 8.25" X 7.75"	100 PCS		PCS	1615
BLACK W/RED STRIPE	BALLOTS-BUNDLES		PCES/PO EXP. SHIP.	POIDS EXP.-WT. SHIPPED
	2		100	1615
<b>TERMS AND CONDITIONS OF SALE</b>	COULÉE INFO-HEAT INFO		QTE-QTY	FORME-SHAPE
	43653941			I.A.C.
<b>SEE DISCLAIMERS AND LIMITATIONS ON THE REVERSE SIDE</b>	INSTRUCTIONS			ENT.-WT.
	GRAIN TO RUN ALONG 7.75"			
	THICKNESS TOL.: +.030"/- .000"			
	TOL: +.030"/- .000"			
	PRIOR DIST/ORD: 01 616845			
	INSTRUCTIONS (CONT'D.)			
	100 X 8.25" X 7.75"			

DESCRIPTION - ITEM 3	QTE/UNITE COM.-ORDERED		PCES/PO COM.-ORD.	POIDS COM.-WT. ORDERED
	BALLOTS-BUNDLES		PCES/PO EXP. SHIP.	POIDS EXP.-WT. SHIPPED
ALL EXCEPTIONS FOR SHORTAGE OR DAMAGE MUST BE NOTED ON THE DRIVER COPY & CUSTOMER COPY OF THE DELIVERY RECEIPTS & SIGNED BY THE DRIVER & CUSTOMER. COPY OF SUCH RECEIPT PROPERLY NOTED MUST BE SUBMITTED WITHIN 10 DAYS WHEN CREDIT IS REQUESTED.	COULÉE INFO-HEAT INFO		QTE-QTY	FORME-SHAPE
				I.A.C.
NOM (LETTRE MOULÉE)-NAME (PRINT ONLY)	INSTRUCTIONS (CONT'D.)			ENT.-WT.
RECU PAR-RECEIVED BY	DATE RECU-DATE RECEIVED			

FEVILLE D'EMBALLAGE - PACKING SLIP





<b>SHIP TO:</b> A M CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131
<b>SOLD TO:</b> AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131.

# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
 Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
 4122744

CUSTOMER PO NUMBER: 01-42198		WORK PACKAGE:		CUSTOMER PART NUMBER: 6879 A97075-60		SHIP RUN/LOAD ID: 101230/11		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1061984	LINE ITEM: 1	SHIP DATE: 28-FEB-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE			
WEIGHT SHIPPED: 3506 LB	QUANTITY: 2 PCS EST.	B/L NUMBER: 2016662	GAUGE: 2.5000 IN		WIDTH: 48.500 IN	LENGTH: 144.500 IN			

### Certified Specifications

AMS 4078/RevG  
 ASTM B 209/Rev07  
 BSS 7055/RevA  
 DPS 4.713/RevAH  
 GSS16100/RevG

AMS-QQ-A-250/12  
 ASTM B 594/Rev06  
 CMMP 025/RevR  
 EAC MS1011/RevE  
 MMS 159/RevN

AMS-STD-2154  
 EAC 5439/RevH  
 CSTI 006/RevC  
 GAMPS 9101/RevB  
 PS 21211/RevK

Test Code: 4287

### Test Results

Lot: 436539A1 Cast 149

Drop 39

Ingot 4

(ASTM B8/B55Z)


Tensile:	Temp	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	71.0 : 71.5 (490 : 493)	59.6 : 61.2 (411 : 422)	10.3 : 10.6

(ASTM E1004)

Conductivity %IACS :	41.1 Min	41.5 Max
(MS/M) :	23.8 Min	24.1 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.22	1.5	0.02	2.5	0.20	5.7	0.03	0.01	0.01	TOT 0.03

CASTLE METALS CORP.  
 DATE RCVD 3/4/08  
 IAC 6879  
 APPROVED BY 

1854

**KAISER  
ALUMINUM**Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586**CERTIFIED TEST REPORT**Serial Number  
4122744

Lot: 436673A8 Cast 149

Drop 38

Ingot 3

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	71.0 : 71.3 (490 : 492)	59.8 : 60.0 (412 : 414)	10.4 : 10.4

(ASTM E1004)

Conductivity %IACS :	41.0 Min	41.2 Max
(MS/M) :	23.8 Min	23.9 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.22	1.4	0.02	2.5	0.21	5.8	0.02	0.01	0.01	TOT 0.03

**ALLOY LIMITS**

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

**Aluminum Remainder****TEST NOTES**

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

**CERTIFICATION**

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

**BILL POYNOR, LABORATORIES SUPERVISOR**




14/1/0